Year of entry: 2022/23

Programme Specification

1	**Awarding body**	University of London					
2	**Teaching Institution**	**Birkbeck College**					
3	**Programme Title(s)**	**Cert HE Mathematics**					
4	**Programme Code(s)**	UCHMTHMT_C					
5	**UCAS code**	N/A					
6	**Home Department**	Economics, Mathematics and Statistics					
7	**Exit Award(s)**	N/A					
8	**Duration of Study** (number of years)	2					
9	**Mode of Study**	FT		PT	✓	DL	
10	**Level of Award (FHEQ)**	4					
11	**Other teaching depts or institution**	N/A					
12	**Professional, Statutory Regulatory Body(PSRB) details**	N/A					
13	**QAA Benchmark Group**	Mathematics, Statistics and Operational Research					

14	**Programme Rationale & Aims**
	The Cert HE Mathematics is aimed at students with an A-level or equivalent in mathematics who wish to acquire some university level mathematics but are not willing or able to commit to a full four year BSc programme. This award has the advantage that it be completed by studying for 2 evenings a week rather than the 3 evenings usually required on BSc programmes. A main aim of introducing this programme is to provide more flexible provision at undergraduate level. Distinctive features: Part-time, evening, face to face study. Regular coursework forms a part of all modules, to further develop independent learning. Completion would allow a flexible entry route into year 2 of an appropriate BSc programme at Birkbeck.

15	**Entry Criteria**
	Students who have recently undertaken qualifications require a minimum of two A-levels, or the equivalent. We welcome applicants without traditional entry qualifications as we base decisions on our own assessment of qualifications, knowledge and previous work experience. We may waive formal entry requirements based on judgement of academic potential.. A-level mathematics, or the equivalent, is desirable, but not essential. Applicants without such a qualification are required to pass an entrance test.

16	**Learning Outcomes**
	On successful completion of the CERT HE MATHEMATICS a student will be expected to be able to: **Subject Specific** LO1 Knowledge and understanding of, and the ability to use, mathematical and/or statistical techniques. LO2 Knowledge and understanding of a range of results in mathematics. LO3 Appreciation of the power of generalization and abstraction in the development of mathematical theories. **Intellectual** LO4 Develop a logical and systematic approach to problem solving. **Practical** LO5 Problem-solving skills, including the ability to assess problems logically and to approach them analytically. LO6 Highly developed quantitative skills **Personal and Social** LO7 Ability to work independently with patience and persistence. LO8 Time-management and organizational skills. LO9 Good communication skills, including the ability to write coherently. LO10 Ability to complete work in a limited time period.

17	**Learning, teaching and assessment methods**
	Teaching sessions are usually lectures which present both theory and worked examples. Detailed course notes, problems and worked solutions are provided to accompany lectures on each course. This facilitates the independent study necessary to understand and assimilate the material. Regular coursework and a variety of assessment methods are also designed to be formative and promote learning. Individual tutorials are available on request, and students may also consult staff by telephone and email. The methods of assessment used are: Unseen 3 hour examinations in June. Assessed assignments. Short in-class tests. For most modules 80% of the assessment comes from unseen examinations in June. This allows time for students to assimilate the material and develop a thorough understanding of the course curriculum. The 20% contribution from coursework enables students to get practice in

	tackling and solving problems independently, without the time pressure of examinations, and gives staff an opportunity to give relevant feedback. The majority of our level 4 and 5 modules have four pieces of assessed coursework. This allows more frequent feedback to students at the start of their university careers and is particularly appropriate for Cert HE and Dip HE students. The range of assessments, and the type of questions and problems set within examinations and assignments are structured to balance theory and practice, to address the individual learning outcomes and to discriminate between different levels of achievement. However, the assessment strategy recognizes that students may exhibit very different aptitudes and abilities in different aspects of the course and in different forms of assessment. This is particularly relevant to Birkbeck students who vary considerably in terms of academic background, prior work experience, current career and future career plans. The assessment strategy is therefore designed to: (i) ensure a good coverage of the curriculum and address the range of learning outcomes, (ii) perform an on-going formative function via the theoretical and practical assignments associated with all course modules; (iii) give all students the opportunity to demonstrate their strengths and show what they can do well. The regulations governing awards follow the CAS regulations. In particular, a student must pass 120 credits to gain the award. Students take 60 credits of core modules at level 4 in year 1. In Year 2, they choose 60 further option modules at level 4 or 5. The usual recommendation would be for these modules to be the level 4 ones, but we have included two level 5 options for added flexibility. Both the external and the second internal examiner normally scrutinize all examination papers before they are finalized. Exams and Essays are all double marked. Coursework is marked by the first examiner and moderated by the second internal examiner. All marks are moderated by the External Examiner, who is invited to comment on the suitability of the assessment methods, criteria and procedures. These comments influence any changes that are recommended at the programme review meeting.

18	**Programme Description**
	This programme is designed for students with an A-level or equivalent in mathematics. The first year is devoted to algebra and calculus, to give you a thorough grounding in these two essential parts of the mathematical toolkit. However the second year has more flexibility. Students have a choice of modules taken from the BSc Mathematics programme. Students meet with the programme director before the start of the academic year and decide on a suitable programme of study based on their interests and experience. In each year students will complete two 30 credit modules. Each module runs through the year, with final exams being in the May/June exam period.

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19	**Programme Structure**

Year 1

Level	Module Code	Module Title	Credits	Status*
4	EMMS096S4	Calculus 1: Single Variable	30	Core
4	EMMS097S4	Algebra 1: Techniques & Applications	30	Core

Year 2

Level	Module Code	Module Title	Credits	Status*
4/5	Option	Any level 4 or 5 module in the options list below	30	Option
4/5	Option	Any level 4 or 5 module in the options list below	30	Option

Indicative list of options

Level	Module Code	Module Title	Credits	Status*
4	BUEM096S4	Numbers, Proofs and Counting	30	
4	BUEM099S4	Explorations in Mathematics	30	
5	BUEM001S5	Calculus 2	30	
5	EMMS098S5	Probability and Statistics	30	

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

20	**Programme Director**	Andrew Bowler
21	**Start Date** ***(term/year)***	Autumn 2010
22	**Date approved by TQEC**	Spring 2010
23	**Date approved by Academic Board**	Summer 2010
24	**Date(s) updated/amended**	7 October 2020